

AMENDMENT TO THE CLAIMS

Listing of Claims:

1. (Currently Amended) A base station, which communicates with a radio terminal, comprising:

an adaptive antenna;

a transmitting portion for transmitting a signal;

a receiving condition acquisition portion for acquiring ~~a~~ from a radio terminal
information indicative of the receiving condition of the signal in a radio terminal ~~signal from the~~
~~radio terminal concerning a quality of reception of said radio terminal;~~ and

a directivity control portion for controlling the directivity of said adaptive antenna
based on said information indicative of the receiving condition of the signal in the radio terminal
wherein said transmitting portion transmits said signal while changing directivity in response to
the quality of reception of said radio terminal.

2. (Currently Amended) The base station according to claim 1,
wherein said directivity control portion sets the directivity of said adaptive
antenna to be non-directional until a connection request is received from said radio terminal, and
controlling controls the directivity of said adaptive antenna based on said information indicative
of the receiving condition of the signal in the radio terminal upon at a direction in response to the
quality of reception of said radio terminal after receiving the a connection request from said
radio terminal.

3. (Currently Amended) A base station, which communicates with a radio terminal, comprising:

an adaptive antenna;

a transmitting portion for transmitting a signal;

a receiving condition acquisition portion for acquiring from a radio terminal information indicative of the receiving condition of the signal in the radio terminal ~~a signal from the radio terminal concerning a quality of reception of said radio terminal which depends on a transmission direction of a radio wave of the adaptive antenna, while changing the directivity that the adaptive antenna transmits the transmission direction of the radio wave of the adaptive antenna; and~~

a directivity control portion for controlling the directivity that the adaptive antenna transmits based on said information indicative of the receiving condition of the signal in the radio terminal wherein said transmitting portion transmits said signal while changing directivity ~~the directivity of said adaptive antenna at the transmission direction of the radio wave corresponding a signal concerning the good quality of reception of said radio terminal among the acquired signals.~~

4. (Currently Amended) A base station, which communicates with a radio terminal, comprising:

an adaptive antenna;

a transmitting portion for transmitting a signal;

a receiving condition acquisition portion for acquiring a data rate control signal from a radio terminal as information indicative of the receiving condition of the signal in the radio terminal ~~from the radio terminal which depends on a transmission direction of a radio wave of the adaptive antenna, while changing the transmission direction of the radio wave of the adaptive antenna; and~~

a directivity control portion for controlling the directivity that the adaptive antenna transmits based on said data rate control signal wherein said transmitting portion transmits said signal while changing directivity ~~of said adaptive antenna at the transmission direction of the radio wave corresponding to a good data rate control.~~

5. (Currently Amended) The base station according to claim 1,
wherein the receiving condition acquisition portion acquires a signal from the radio terminal, which is used for changing a rate of data transmitted from the base station to the radio terminal,-
and the directivity control portion controls the directivity of such adaptive antenna based upon the signal used for changing the rate of data acquired from the radio terminal.